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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,595	11/12/2003	Michael S. South	PHA 4163.5 (3455/1)	9970
321	7590	06/22/2004	EXAMINER	
SENNIGER POWERS LEAVITT AND ROEDEL ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			KUMAR, SHAILENDRA	
			ART UNIT	PAPER NUMBER
			1621	

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/706,595	Applicant(s) SOUTH ET AL.	
	Examiner SHAILENDRA - KUMAR	Art Unit 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-59 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1621

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-59, drawn to non heterocyclic compounds, composition and method of use when A, U, K, E<sup>0</sup> is CONR, classified in class 564, subclass various.
- II. Claims 1-59, drawn to non heterocyclic compounds, composition and method of use, when A, U, K, or E<sup>0</sup> is CSNR, classified in class 564, subclass various.
- III. Claims 1-59, drawn to non heterocyclic compounds and composition, when , A, U, K, or E<sup>0</sup> is SO or SO<sub>2</sub> classified in class 568, subclass various.
- IV. Claims 1-59, drawn to non heterocyclic compounds and composition, when , A, U, K, or E<sup>0</sup> is SO<sub>2</sub>NR<sub>7</sub>, classified in class 564, subclass various.
- V. Claims 1-59, drawn to drawn to non heterocyclic compounds and composition, when , A, U, K, or E<sup>0</sup> is SE(O), classified in class 552, subclass various.
- VI. Claims 1-59, drawn to non heterocyclic compounds, composition and method of use when A, U, K, E<sup>0</sup> is P(O)(R<sub>8</sub>), classified in class 568, subclass 1+.

Art Unit: 1621

- VII. Claims 1-59, drawn to non heterocyclic compounds, composition and method of use when A, U, K, E<sup>0</sup> is NRP(O)(R8), classified in class 564, subclass various.
- VIII. Claims 1-59, drawn to non heterocyclic compounds, composition and method of use when A, U, K, E<sup>0</sup> is CNR6R7, classified in class 564, subclass various.
- IX. Claims 1-59, drawn to non heterocyclic compounds, composition and method of use when A, U, K, E<sup>0</sup> is O, S, C(O), C(S) or C(S)O, classified in class 568, subclass various.
- X. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is morpholino, classified in class 544, subclass various.
- XI. Claims 1-59, drawn to heterocyclic compounds, composition and method of use, when B or Y is piperazine, classified in class 544, subclass various.
- XII. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is piperidinyl, classified in class 546, subclass various.

Art Unit: 1621

- XIII. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is pyranlyl, classified in class 548, subclass various.
- IVX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is tetrahydrofuranyl, classified in class 549, subclass various.
- VX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is tetrahydropyranyl, classified in class 548, subclass various.
- XVI. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is indenyl, classified in class 548, subclass various.
- XVII. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is benzofuranyl, classified in class 549, subclass various.
- XVIII. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is benzothiophenyl, classified in class 549, subclass various.

Art Unit: 1621

- IXX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is indolyl, classified in class 548, subclass various.
- XX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is isoindolyl, classified in class 548, subclass various.
- XXI. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is benzoxazolyl, and isobenzoxazolyl, classified in class 549, subclass various.
- XXII. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is quinolinyl and isoquinolyl, classified in class 546, subclass .
- XXIII. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is cinnolinyl, classified in class 544, subclass .
- IVXX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is thienyl, classified in class 549, subclass various.
- VXX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is furyl, classified in class 549, subclass various.

Art Unit: 1621

- XXVI. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is imidazolyl, classified in class 548, subclass various.
- XXVII. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is pyrazolyl, classified in class 548, subclass various.
- XXVIII. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is thiazolyl, classified in class 548, subclass various.
- XXVIII. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is pyridyl, classified in class 546, subclass various.
- XXX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is pyrimidinyl, classified in class 544, subclass various.
- IXXX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is isoxazolyl, classified in class 549, subclass various.

Art Unit: 1621

IIXXX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is pyrazinyl, classified in class 548, subclass various.

IIIXXX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is pyridyzanyl, classified in class 546, subclass various.

IVXXX. Claims 1-59, drawn to heterocyclic compounds, composition and method of treatment, when B or Y is triazine, classified in class 544, subclass various.

1. The inventions are distinct, each from the other because of the following reasons:

The above 34 groups of invention are distinct from each other on the basis of their chemically distinct structure, which are classified in different class/subclass according to US classification system. A reference anticipating one of the above group may not render the others obvious under 35 USC 103. Hence the restriction requirement is proper.

Additionally, applicants should elect a single disclosed species for the either of the group elected, and point out to the claims that read on the elected species.

2. In view of the complexity of the restriction requirement, a written restriction requirement is made.



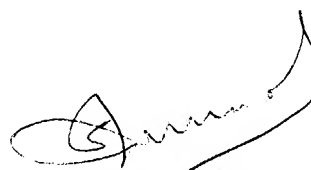
Art Unit: 1621

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Art Unit: 1621

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to S.Kumar whose telephone number is (571)-272-0640.

  
SHAIENDRA KUMAR  
PRIMARY EXAMINER  
GROUP 1200  
1621

S.Kumar

June 18, 2004